Appendix 7

Triggers for Community Containment Interventions

WHO Pandemic Sub-Phases and Key Events Requiring Intervention in KY

WHO Phase	Sub-Phase	Key Events
1	1	
2	2	
3	3a	Disease in wild birds in KY.
3	3b	Disease in poultry flocks in KY.
3	3c	Human cases in KY, resulting from exposure outside KY, with very little or no risk of human-to-human spread.
3	3d	Human cases in KY, resulting from exposure in KY, with very little or no risk of human-to-human spread.
4	4a	Disease in wild birds in KY.
4	4b	Disease in poultry flocks in KY.
4	4c	Human cases in KY, resulting from exposure outside KY, with small risk of human-to-human spread.
4	4d	Human cases in KY, resulting from exposure in KY, with small risk of human-to-human spread.
5	5a	Disease in wild birds in KY.
5	5b	Disease in poultry flocks in KY.
5	5c	Human cases in KY, resulting from exposure outside KY, with moderate degree of human-to-human spread.
5	5d	Human cases in KY, resulting from exposure in KY, with moderate degree of human-to-human spread.
6	6a	Human cases with potential for sustained person-to-person spread, scattered cases allowing case-based control measures.
6	6b	Human cases with sustained person-to-person spread, no vaccine available, use of community-based control measures.
6	6c	Human cases with sustained person-to-person spread, no vaccine available, use of community-based control measures plus selective vaccination, then widespread vaccination.
6	6d	First wave of pandemic receding, recovery and alertness for next wave.

Several of these stages have the same description but occur at different periods of the pandemic's development. The events are listed separately because their impact and appropriate responses will need to be different as the pandemic progresses. For example, if influenza is found in wild birds during WHO phase 3 when there is little or no risk of human-to-human spread, the level of concern and response will be much different than in WHO phase 5 when there are large clusters of human-to-human spread.

Strategy for Conceptual Framework

The strategies utilized at the different stages of the epidemic can be grouped together conceptually:

1. Primarily Response to Avian Influenza in Birds

• In Stages 3A, 3B, 4A, 4B, 5A and 5B, the focus is on control of novel influenza in wild and domestic birds, and prevention of spillover infection from birds to closely exposed people.

The approach to these situations is primarily presented in the appendix on zoonotic disease, with supporting material in the appendices on laboratory services, occupational health, surveillance and rapid response/containment.

2. Case-Based Response to Infection in Humans

• In Stages 3C, 3D, 4C, 4D, 5C, 5D and 6A, the *focus is on case-based control measures* to be led by public health agencies.

3. Community-Based Response to Infection in Humans

• In Stage 6B, the *focus is on community-based measures to control or mitigate a pandemic*. This strategy will be *initiated when case-based control measures are no longer feasible* or effective, and/or when an effective vaccine is not yet available.

4. Community-Based Response to Infection in Humans, Plus Vaccine

• In Stage 6C, the *focus is on selective and then universal vaccination*. While vaccination efforts are being implemented, the **community-based control measures** from Stage 6B will have to be continued.

5. Recovery

• In Stage 6D the focus is on recovery, *restoring medical care and public health functions*, and *maintaining surveillance* for a second or subsequent wave of influenza.

				Pand	emic I	nfluen	za Inte	erventi	ions ar	nd Stag	ges							
◆ = Alert : Notification of critical	1	2	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	6a	6b	6c	6d
systems and personnel of their impending activation			Disease in wild birds	Disease in poultry	Imported human cases	Local human cases	Disease in wild birds	Disease in poultry	Imported human cases	Local human cases	Disease in wild birds	Disease in poultry	Imported human cases	Local human cases	Scattered human cases	Widespread human cases, no vaccine	Widespread human cases, vaccine	Recovery
Planning	* *	**	***	***	***	* * *	***	***	***	***	***	***	***	***	***	***	***	***
Wild bird surveillance		•	***	***	***	***	***	***	* *	***	***	***	**	***	•			
Domestic poultry surveillance	* *	**	***	***	***	* * *	* * *	***	***	***	* * *	***	***	* * *	**			
Surveillance for human impact	**	**		**	**	* *	**	**	***	***	**	* *	***	* * *	***	* * *	* * *	***
Surveillance for human cases			**	**	***	* * *	* * *	***	***	***	* * *	***	***	***	***	* *	* *	•
Laboratory strain surveillance	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	* * *	* * *	* * *
Public health laboratory support for interventions			**	**	***	***	**	**	***	***	**	**	***	***	***			**
Surveillance for disease in poultry workers			**	***	**	***	**	***	**	***	**	***	**	***	**			
PPE for poultry responders			**	***	**	***	**	***	**	***	**	***	**	***	**			
Antiviral prophylaxis for poultry responders			**	***	**	***	**	***	**	***	**	***	**	***	**			
Antiviral treatment of hospitalized human cases			**	**	***	•••	**	**	***		**	**	***	***	***	***	***	***
Antiviral treatment of all human cases within 24 hours of onset			**	**	***	***	**	**	***	***	**	**	***	***	***	***	***	***
Prophylactic antiviral treatment of all household ands other close contacts within 24 hours							**	**	***	***	••	**	***	***	***	***	***	***
PPE for healthcare workers (HCW)					***	***	**	**	***	***	**	**	***	***	***	***	***	***
Antiviral prophylaxis for all HCW					**	**	* *	**	* *	**	**	**	**	* *	***	* * *	* * *	

				Pand	emic I	nfluen	za Inte	erventi	ions ar	nd Stag	ges							
◆ = Alert : Notification of critical	1	2	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	6a	6b	6c	6d
systems and personnel of their impending activation ◆ ◆ = Standby: Initiate decision-making processes for imminent activation including mobilization of resources and personnel. ◆ ◆ ◆ = Activate: Implementation of the activity/intervention			Disease in wild birds	Disease in poultry	Imported human cases	Local human cases	Disease in wild birds	Disease in poultry	Imported human cases	Local human cases	Disease in wild birds	Disease in poultry	Imported human cases	Local human cases	Scattered human cases	Widespread human cases, no vaccine	Widespread human cases, vaccine	Recovery
Infection control in HCF			**	* *	* * *	* * *	* *	**	***	* * *	**	**	***	***	* * *	***	***	* *
Directed voluntary isolation of cases at home					***	***	**	**	***	***	**	**	***	***	***	***	***	**
Self-isolation of cases						**	**	**	**	**	**	**	**	**	***	***	***	
Compulsory isolation of cases by LHD					***	***	**	**	***	***	**	**	***	***	***			
Monitoring of contacts by LHD					***	* * *	* *	* *	***	***	* *	* *	***	***				
Directed voluntary quarantine of contacts							*	•	***	***	*	•	***	***	***			
Compulsory quarantine of contacts by LHD					**	**	•	•	**	**	•	•	**	**	***			
Self-quarantine of contacts													***	***	***	***	* * *	
Support home management of ill persons out of HCFs and medical offices				***	***			***	***	***	**	**	***	***	***	***	***	***
Support the social expectation that persons who become ill with respiratory symptoms will strictly self-isolate at home									**	**	•	•	***	***	***	***	***	**
Support the social expectation that persons who become ill while away from home will take prescribed control measures and proceed directly home or to a healthcare facility								•	•	**	•	•	**	**	**	***	***	**

				Pande	emic I	nfluen	za Inte	erventi	ons an	d Stag	ges							
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systems and personnel of their impending activation			Disease in wild birds	Disease in poultry	Imported human cases	Local human cases	Disease in wild birds	Disease in poultry	Imported human cases	Local human cases	Disease in wild birds	Disease in poultry	Imported human cases	Local human cases	Scattered human cases	Widespread human cases, no vaccine	Widespread human cases, vaccine	Recovery
Provide directions for complete self- isolation at home of ill and convalescent cases to reduce transmission to care-givers					••	**	•	•	••	••	•	•	**	**	**	***	***	••
Provide community support for persons who are confined to home to reduce breaches of isolation and quarantine					**	**	•	•	••	**	•	•	**	**	**	***	***	**
Support organizational policies that support workers and students for staying home while ill, or with an ill family member					**	**	•	•	••	••	•	•	**	**	••	***	***	**
Develop practical measures in day- cares, schools, workplaces, colleges, etc. to immediately detect and exclude persons ill with influenza-like illness					•	•	•	•	•	•	•	•	**	**	**	**	**	**
Provide ongoing prophylactic antiviral medications for healthcare workers, EMS workers, public health workers, agricultural and veterinary workers and other first responders who are exposed repeatedly					•	•	•	•	•	•	•	•	**	**	***	***	***	**
Assure that appropriate PPE is provided for all whose essential occupations put them at increased risk for exposure and infection (e.g., healthcare workers, public safety workers, teachers, transit drivers, food store workers)					**	**	٠	•	**	**	•	•	**	**	**	***	***	**

					Pandem	ic Influe	nza Inte	rvention	s and St	ages								
♦ = Alert : Notification of critical	1	2	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	6a	6b	6c	6d
systems and personnel of their impending activation					s.				ş				S		S	s, no	es,	
 ♦ = Standby: Initiate decision-making processes for imminent activation including mobilization of resources and personnel. ♦ ♦ ♦ = Activate: Implementation of the activity/intervention 			Disease in wild birds	Disease in poultry	Imported human cases	Local human cases	Disease in wild birds	Disease in poultry	Imported human cases	Local human cases	Disease in wild birds	Disease in poultry	Imported human cases	Local human cases	Scattered human cases	Widespread human cases, no vaccine	Widespread human cases, vaccine	Recovery
Provide antiviral prophylaxis promptly for all children in the same classroom as a case, or who have attended classes with a case															***	***	***	
Provide antiviral prophylaxis for all members of a case's work group who have regular face-to-face interactions with the case															***	***	***	
Support temporary social changes that result in greatly reduced face-to-face interactions throughout the community, i.e., social distancing																***	•••	
Schools: graded response including strict exclusion, targeted antiviral prophylaxis, reactive closure, and community-wide closure													***	***	***	***	***	**
Cancel large gatherings, i.e. ball games and conferences													**	••	••	***	***	
Build social support for individual protective behavior changes					***	***			***	***			***	***	***	***	***	***
Support employers and employees in maximizing the proportion of those who can work from home in doing so														**	**	***	***	
Acquire, stockpile and manage needed antiviral medications, personal protective equipment, and other supplies; recommend central control of at least the antiviral supply	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***

	Pandemic Influenza Interventions and Stages																	
 ♦ = Alert: Notification of critical systems and personnel of their impending activation ♦ ♦ = Standby: Initiate decision-making processes for imminent activation including mobilization of resources and personnel. ♦ ♦ ♦ = Activate: Implementation of the activity/intervention 	1	2	Disease in wild birds	Disease in poultry	Imported human cases	Local human cases	Disease in wild birds	Disease in poultry	Imported human cases	Local human cases	Disease in wild birds	Disease in poultry q	Imported human cases 55	Local human cases	Scattered human cases	Widespread human cases, no q9	Widespread human cases, so vaccine	Recovery P99
Identify and use volunteers to extend community ability to carry out many essential functions	***	***		***	***		***	***	***			***	***	***	***	***	***	***
Identify government services, including DOH services, that can be put on hold so unneeded workers can stay at, or work from home and available workers can focus on essential tasks													**	**	**	***	***	
Assure enough antiviral medications are available and used only for priority indications					***	***	**	**	***	•••		**	***	***	***	***	***	